

---

# Differentiated Instruction



## Effective Strategies for High Ability Learners

Carolyn Hoy

Warwick HS Gifted Support

February 2011

# Curriculum vitae

---

- ❖ BS Ed Indiana University of PA, Communications, 1978
- ❖ M Ed Millersville University, Gifted education, 2010
- ❖ Member, PAGE Pennsylvania Association for Gifted Education
- ❖ Member, Steering Committee for Gifted Education, IU-13
- ❖ 1999- present: Gifted support, Warwick High School
- ❖ 1996-1999: English as a Second Language teacher, Donegal High School
- ❖ 1978-1991: Secondary English teacher, Donegal High School

# Agenda

---

- ❖ Define the characteristics of gifted children
- ❖ Identify the critical need for differentiation
- ❖ Provide strategies for teaching high ability students
- ❖ Collaboration time: work time



# Characteristics of Gifted Children

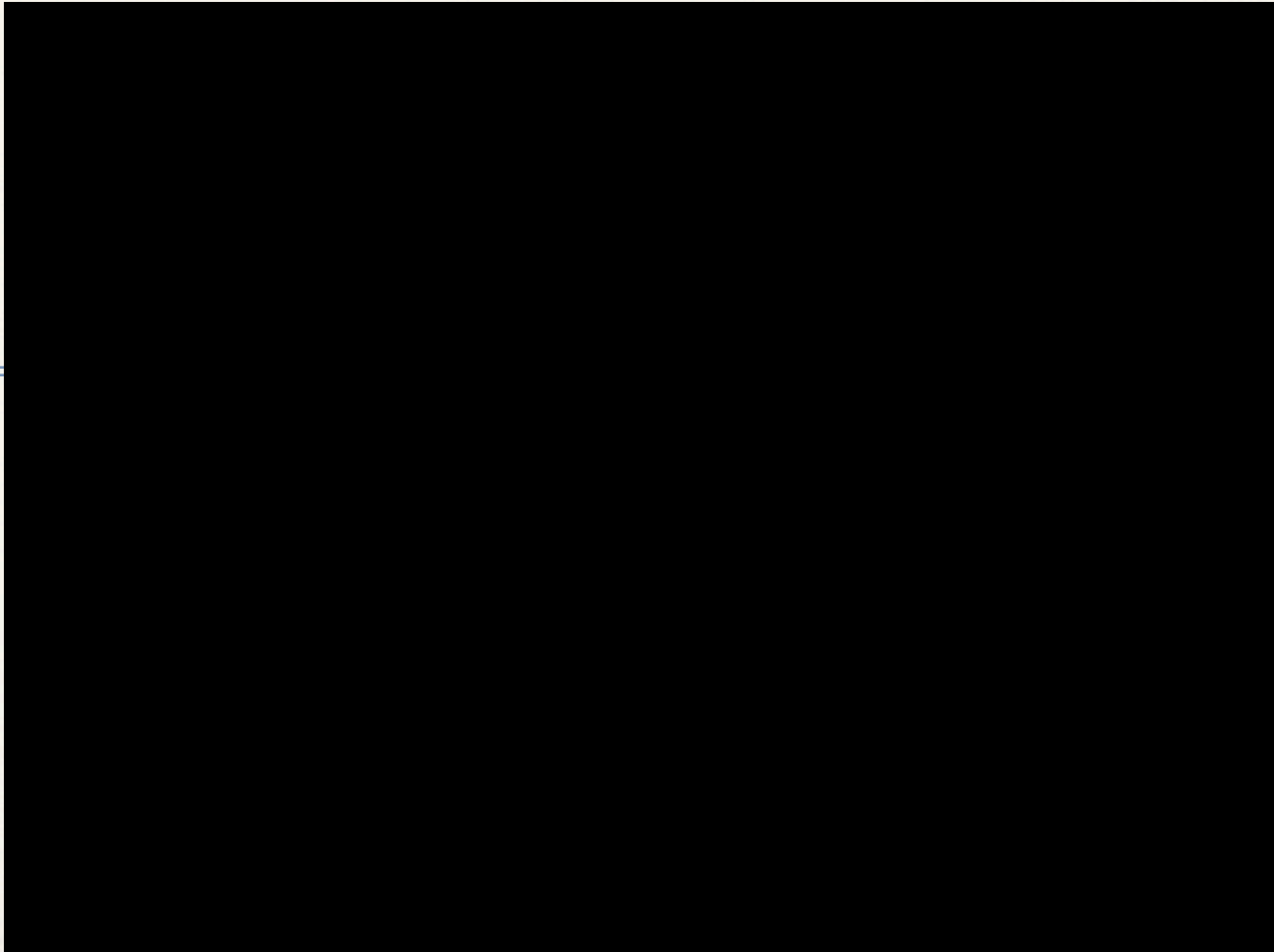
---



## *Notes on the gentle art of herding cats*

1. Cats don't like to be herded  
(in fact, you can't really herd cats)
  2. Cats prefer to herd themselves
  3. Cats understand that they sometimes  
need to be herded (that doesn't make them  
any easier to herd)
  4. Cats don't like being reminded that  
they are being herded
  5. Harsh herding has negative consequences
  6. Herd gently, but firmly, with affection  
or fish as a reward
- Remember, you are a cat, too  
we all need herding, at one time or another

# Gifted Education: Let's do it





# Your turn

---

PSEA / PAGE Booklet:  
Understanding and Challenging the Gifted

<http://wsddifferentiation.wikispaces.com/Web+links>

# Need for Differentiation

---





# What is differentiated instruction?

---

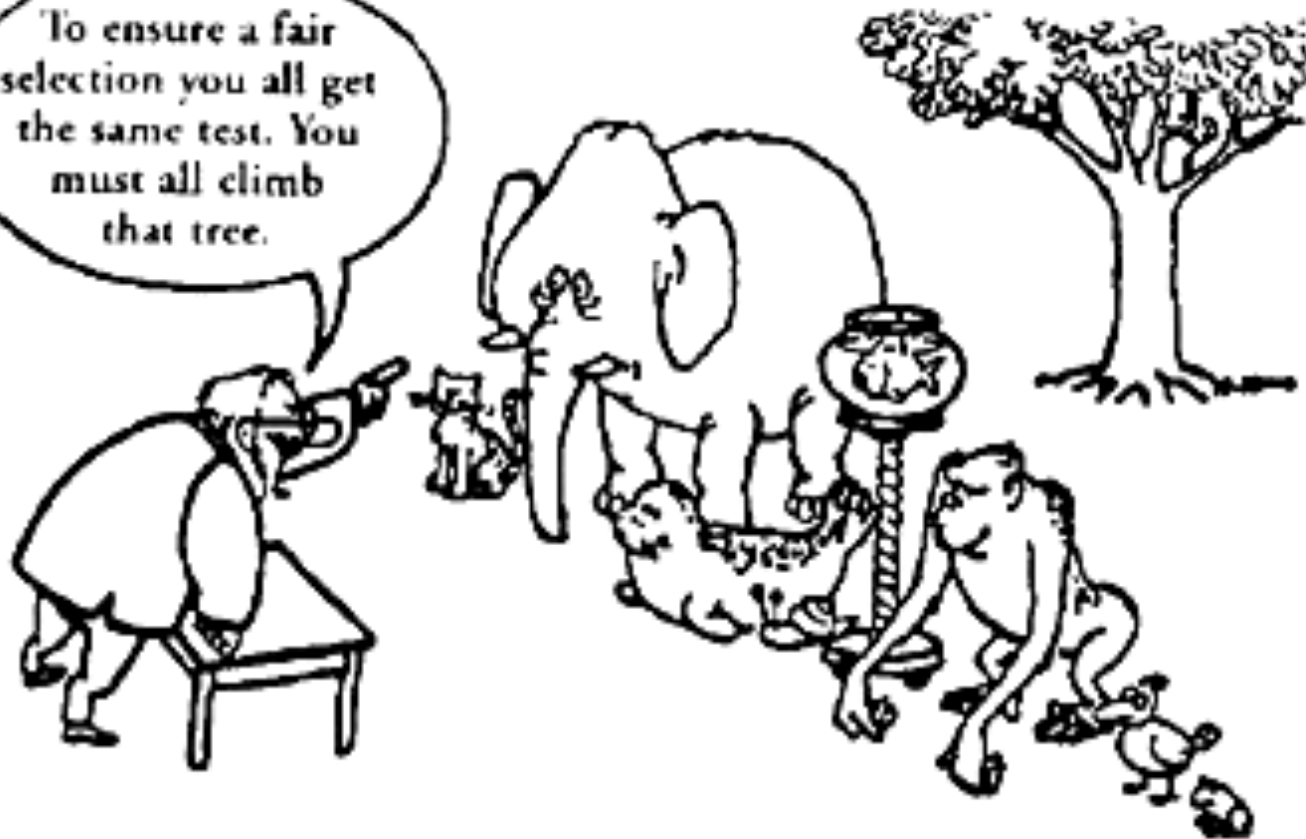
“... ensuring that what a student learns, how he/she learns it, and how the student demonstrates what he/she has learned is a match for that student’s readiness level, interests, and preferred mode of learning.”

Carol Ann Tomlinson (as cited by Ellis, Gable, Greg, & Rock, 2008, p. 32)

Differentiation stems from beliefs about differences among learners, how they learn, learning preferences and individual interests

(Anderson, 2007).

To ensure a fair selection you all get the same test. You must all climb that tree.



<http://www.itpa.lt/~akupl/wom/jokes.htm>

# Critical Need for Differentiation

---

Those at greatest risk of learning the least in classrooms are those at the top range of ability because they rarely experience learning challenges and may lose confidence in their ability to perform well when confronted.



# Critical Need for Differentiation

---

- ❖ Giftedness is mental processing outside the norm
- ❖ Giftedness is not achievement
- ❖ Giftedness is asynchronous development
- ❖ Gifted children often have heightened intensities and awareness different from the norm (see [Dabrowski link](#))
- ❖ They are out of sync internally, with cognitive, social, and emotional development on separate and different timetables

# Characteristics of gifted learners which support the need for differentiation

---

- ❖ They learn new material in less time.
- ❖ They tend to remember what they have learned which makes review painful.
- ❖ They perceive ideas and concepts at more abstract and complex levels than their peers. Often, they become passionately interested in specific topics and have difficulty moving on to other learning tasks until they are satisfied that they have learned all they can about the topic.
- ❖ Gifted students can operate on many levels of concentration simultaneously meaning they can monitor classroom activities without paying direct attention to them.



# 7 Guiding Principles for curriculum development for gifted

---

- ❖ The content of curricula for gifted students should focus on and be organized to include more **elaborate, complex, and in-depth** study of major ideas, problems, and themes that integrate knowledge within and across systems of thought.
- ❖ Curricula for gifted students should allow for the development and application of **productive thinking skills** to enable students to reconceptualize existing knowledge and/or generate new knowledge.
- ❖ Curricula for gifted students should enable them to explore constantly changing knowledge and information and **develop the attitude that knowledge is worth pursuing in an open world.**



# 7 guiding principles for curriculum development for gifted

---

- ❖ Curricula for gifted students should encourage exposure to, selection, and use of **appropriate and specialized resources**.
- ❖ Curricula for gifted students should **promote self-initiated and self-directed learning and growth**.
- ❖ Curricula for gifted students should provide for the **development of self-understanding** and the understanding of one's relationship to persons, societal institutions, nature, and culture.
- ❖ Evaluations of curricula for gifted students should be conducted in accordance with the previously stated principles, **stressing higher level thinking skills, creativity, and excellence in performance and products**.

# Common mistakes with gifted

---

- ❖ Asking your gifted students to serve as tutors for students who are struggling.

# Common mistakes with gifted

---

- ✧ Giving your gifted students more work when they finish early.



# Common mistakes with gifted

---

- ❖ Only allowing gifted students to move ahead when they complete the grade/age designed work assignments with 100% accuracy.
- ❖ Source: Davidson Institute for Talent Development

# Why Schools Kill Creativity

# Strategies for teaching high ability students

---





# Suggested strategies for differentiation with high ability

---

1. Curriculum Compacting
2. Learning Contracts
3. Extension Menus
4. Independent Projects/  
Investigations
5. Higher-level Questioning  
(Bloom's)



# Curriculum Compacting

## *Description*

---

Curriculum Compacting is a three-step process implemented by the teacher for one or more students who have mastered portions of the essential curriculum:

Pre-assess what a student knows about content/skills to be studied

Modify learning activities so that student only receives instruction about what he/she does not already know

Provide alternate learning activities that offer acceleration or meaningful and challenging enrichment





# Curriculum Compacting

## *Recommended Use*

---

- Curriculum compacting should be used for students who have demonstrated mastery on pre-assessment(s) prior to whole group instruction.
- Curriculum compacting should be used to allow the student choice in use of time “bought” through previous mastery of content skills.





# Curriculum Compacting

## *Teacher Implementation Guide*

---

- Explain the process and its benefits to students and parents
- Document pre-assessment
- Provide written plans and timelines for study
- Compact for part or all of a unit of study
- Let's look at Curriculum Compacting



## Learning Contracts

### *Description*

---

Learning Contracts are agreements between students and teachers that grant the student certain freedoms and choices about completing tasks, yet require the student to meet certain specifications.





## Learning Contracts

### *Recommended Use*

---

- Learning Contracts should be used to manage flexible groups based on the results of pre-assessment.
- Learning Contracts enable the teacher to provide direct instruction to one group while individuals or small groups work independently.





## Learning Contracts

### *Teacher Implementation Guide*

---

- Match skills and content to readiness, interest, and learning profile of student
- Allow the student choice in portions of the contract related to process or product
- Establish clear and challenging criteria for success
- Provide clear directions and behavioral expectations in writing
- Let's look at Learning Contracts



## Extension Menu

### *Description*

---

Extension Menus are an array of independent learning activities presented in a

2x2

2x3

3x3

format (boxes) to provide students with choices for extending or enriching the essential curriculum.





## Extension Menu

### *Recommended Use*

---

- Extension Menus should be used to provide challenging alternatives that address different abilities, interests, and learning styles.
- Extension Menus can be used throughout a unit of study or as a culminating activity.





# Extension Menu

## *Teacher Implementation Guide*

- 
- Link menu activities to the essential curriculum
  - Establish clear expectations by modeling each activity on the extension menu during whole group instruction prior to assigning menu activities
  - Present an Extension Menu with 2-4 learning activities and increase to 6-9 activities in subsequent menus
  - Let's look at Extension Menus

4.

# Independent Projects / Investigations

---

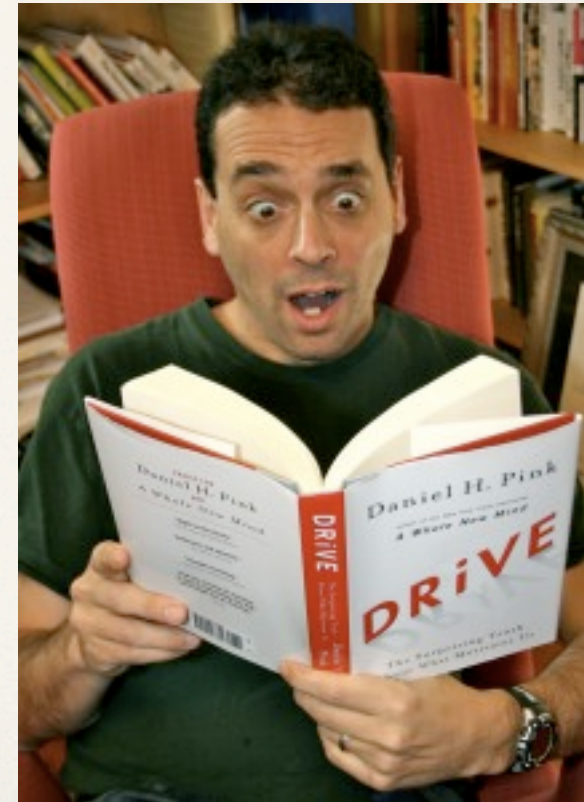
Daniel Pink: DRIVE

Autonomy

Mastery

Purpose

(Watch Dan Pink: Motivation)





5.

## Higher-level Questioning

### *Description*

---

Higher-level questioning requires varying the **level of questions** posed to learners based on their **readiness or abilities**, thus providing the opportunity to challenge each student to his/her potential.





## Higher-level Questioning

### *Recommended Use*

---

Higher-level questioning can be used during class work, discussions, on homework assignments, projects, and assessments.

"The unexamined life is not worth living."

-Socrates



# Higher-level Questioning

## *Teacher Implementation Guide*

---

- Develop questions based on Bloom's Taxonomy to provide varying degrees of difficulty and ensure challenge and success
- Use open-ended questions whenever possible
- Require students to explain and defend their answers
- Try the Socratic Seminar in small or large group settings



# Bloom's Revised Taxonomy

(See poster in packet)

---

- *Creating*
  - ❖ Generating new ideas, products, or ways of viewing things  
Designing, constructing, planning, producing, inventing.
- *Evaluating*
  - ❖ Justifying a decision or course of action  
Checking, hypothesizing, critiquing, experimenting, judging
- *Analyzing*
  - ❖ Breaking information into parts to explore understandings and relationships  
Comparing, organizing, deconstructing, interrogating, finding



# Bloom's Revised Taxonomy

## *(continued)*

---

- *Applying*
  - ❖ Using information in another familiar situation  
Implementing, carrying out, using, executing
- *Understanding*
  - ❖ Explaining ideas or concepts  
Interpreting, summarizing, paraphrasing, classifying, explaining
- *Remembering*
  - ❖ Recalling information  
Recognizing, listing, describing, retrieving, naming, finding



"Mr. Osborne, may I be excused? My brain is full."

*(I Wish We Could Do This!!)*



“Our deepest fear is not that we are inadequate. Our deepest fear is that we are powerful beyond measure. It is our light, not our darkness that most frightens us. We ask ourselves, Who am I to be brilliant, gorgeous, talented, fabulous? Actually, who are you **not** to be? You are a child of God. Your playing small does not serve the world. There is nothing enlightened about shrinking so that other people won't feel insecure around you. We are all meant to shine, as children do. We were born to make manifest the glory of God that is within us. It's not just in some of us; it's in everyone. And as we let our own light shine, we unconsciously give other people permission to do the same. As we are liberated from our own fear, our presence automatically liberates others.”

-Marianne Williamson

*French Suite No. 6 in E: Johannes Bach*



# Collaboration Time

---



*Your Strategies & Ideas:*

*Please explore the wiki space  
and have some more 'purple yam'  
ice cream!*